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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/532,571 | 01/23/2006 | Ye-Sun Joong | 3364P212 | 6863 |
| 7590 | | 01/23/2008 | EXAMINER | |
| Blakely Sokoloff Taylor & Zafman 12400 Wilshire Boulevard 7th Floor Los Angeles, CA 90025 | | | ENGELS-KIRCHEN, JEREMY D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 4152 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 01/23/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|---|-------------------------------------|
| Office Action Summary | Application No. 10/532,571 | Applicant(s) JOUNG ET AL. |
| | Examiner JEREMY D. ENGELSCHIRCHEN | Art Unit 4152 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 April 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-12 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 4/21/2005 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1448)
Paper No(s)/Mail Date 4/21/2005 and 10/29/2007

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

1. Claims 1-12 are pending in this application.

Priority

2. This application claims priority and benefit of Korea Patent Application No. 2002-64413 filed on October 22, 2002.

3. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

4. Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

Drawings

5. The drawings are objected to because item 210 should be changed from "Extendable description generator" to "Extensible description generator" as identified in the Detailed Description. Also, item 220 should be changed from "Extendable description/binary converter" to "Extensible description/binary converter" as identified in the Detailed Description. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from

the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities: On page 11, line 7: "initial object descriptor 310" should be corrected to "initial object descriptor 331" to denote the proper reference according to Fig.3 of the drawings. Appropriate correction is required.

Claim Objections

7. Claim 3 recites the limitation "the MPEG-4 contents storage unit". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for

patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1-4 are rejected under 35 U.S.C. 102(a) as being anticipated by Martinez et al. (“Authoring 744: first results” pgs. 203-206 , *Multimedia '02*, December 1-6, 2002, ACM), hereinafter Martinez.**

10. With respect to claim 1, Martinez discloses in a device for editing and authoring object-based AV (audio and visual) contents using the MPEG-4 (moving picture experts group 4) method, an object-based MPEG-4 contents editing and authoring device (pg. 203, Sect. 1, par. 4, lines 1-2) comprising:

an extensible description generator for receiving either of an MPEG-4 textual format or internal data structure information of object-based MPEG-4 contents (pg. 205, Sect. 3, par. 4, lines 1-5), and MPEG-7 (moving picture experts group 7) descriptions of the MPEG-4 contents (pg. 204, Sect. 3, par. 2, lines 3-4), and generating an XML (extensible markup language) based textual format file including the MPEG-7 descriptions (pg. 205, Sect. 4, lines 1-2);

an extensible description/binary converter for receiving the XML based textual format file including the MPEG-7 descriptions generated by the extensible description generator, and generating them as a binary file (pg. 205, Sect. 5, par. 1, lines 1-2 and pg. 206, Sect. 7, par. 4); and

an XML based contents storage unit for storing the XML based textual format file generated by the extensible description generator and the binary file generated by the extensible description/binary converter (pg. 205, Sect. 5, par. 2, lines 1-2 and 4).

11. With respect to claim 2, Martinez discloses an MPEG-4 contents storage unit for storing the object-based MPEG-4 contents (pg. 205, Sect. 5, par. 2, lines 1-4); and

an MPEG-7 description generator for generating MPEG-7 descriptions of the MPEG-4 contents stored in the MPEG-4 contents storage unit (pg. 204, Sect. 3, par. 2, lines 1-4).

12. With respect to claim 3, Martinez discloses wherein the XML based contents storage unit stores either of the textual format or the binary file generated on the XML basis and storage information of the MPEG-4 contents storage unit of the MPEG-4 contents related to the corresponding XML based file (pg. 205, Sect. 5, par. 2, lines 1-4).

13. With respect to claim 4, Martinez discloses an object-based MPEG-4 (moving picture experts group 4) contents editing and authoring method (pg. 203, Sect. 1, par. 4, lines 1-2) comprising: receiving one of a textual file and an internal data structure of object-based MPEG-4 contents stored in a contents database (pg. 205, Sect. 3, par. 4, lines 1-4);

receiving MPEG-7(moving picture experts group 7) descriptions of the object-based MPEG-4 contents (pg. 204, Sect. 3, par. 2, lines 1-4); and

combining either of the textual file or the internal data structure of the object-based MPEG-4 contents with the MPEG-7 descriptions, generating them into an XML(extensible markup language) based textual format file, and storing the XML based textual format file (pg. 205, Sect. 5, par. 1).

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. **Claim 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Bober et al. ("A MPEG-4/7 based Internet Video and Still Image Browsing System"; Proceedings of the SPIE Vol. 4209, March 22, 2001), hereinafter Bober. Bober is cited by applicant in IDS filed 10/29/2007.**

16. With respect to claim 10, Bober discloses an object-based MPEG-4 (moving picture experts group 4) contents retrieving method comprising:

(a) receiving a user's request for contents retrieval through a retrieval browser (pg. 35, Sect. 3, par. 2, line 1), and

retrieving MPEG-7(moving picture experts group 7) description information stored in an MPEG-7 description storage unit at a retrieval module (pg. 35, Sect. 3, par. 2, lines 2-5);

(b) receiving retrieval results from the retrieval browser, and displaying the retrieval results (pg. 35, Sect. 3, par. 2, lines 6-7);

(c) allowing the user to select desired contents from among the displayed results (pg. 34, Sect. 3, par. 1, lines 2-3); and

(d) loading the contents selected from the retrieval browser from a storage unit, and driving a reproducer to reproduce the loaded data (pg. 35, Sect. 3, par. 2, line 6-7).

17. With respect to claim 11, Bober discloses wherein (a) further comprises: allowing the user to input a keyword through the retrieval browser and request retrieval (pg. 35, Sect. 3, par. 2, lines 1-2; user makes a request i.e. *allowing the user to input a keyword*);

retrieving an MPEG-7 description information storage unit at the retrieval module by using the keyword (pg. 35, Sect. 3, par. 2, lines 3-4); and

generating retrieval results into a list, and transmitting the list to the retrieval browser (pg. 35, Sect. 3, par. 2, lines 6-7).

18. With respect to claim 12, Bober discloses wherein (d) comprises analyzing original contents storage information stored in the MPEG-7 description storage unit, and loading the original contents storage information (pg. 33, Sect. 1, lines 7-10).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez as applied to claim 4 above, and further in view of Ryu et al. (“MPEG-7 Metadata Authoring Tool”; pgs. 267-270, *Multimedia '02*, December 1-6, 2002, ACM), hereinafter Ryu.**

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22. With respect to claim 5, Martinez does not disclose converting the XML based textual format file into a binary file, and storing the binary file. However, Ryu discloses converting the XML based textual format file into a binary file, and storing the binary file (Ryu; pg. 268, Sect. 3.1, lines 19-24).

23. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the invention of Martinez to convert the XML based textual file into a binary file as taught by Ryu because the use of the binary format of the XML document would allow more efficient transmission and storage (Ryu; pg. 268, Sect. 3.1, lines 23-24).

24. **Claim 6, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez in view of Bober.**

25. With respect to claim 6, Martinez discloses an object-based MPEG-4 (moving picture experts group 4) contents editing/authoring and retrieving device (Martinez; pg. 203, Sect. 1, par. 4, lines 1-2) comprising:

 a contents editor/author for receiving either of an MPEG-4 textual format or internal data structure information of object-based MPEG-4 contents (Martinez; pg. 205, Sect. 3, par. 4, lines 1-4), and

 MPEG-7(moving picture experts group 7) descriptions of the MPEG-4 contents (Martinez; pg. 204, Sect. 3, par. 2, lines 1-4), combining them (Martinez; pg. 205, Sect. 3, par. 3, lines 1-2), editing or authoring them as an XML (extensible markup language) based textual

format file or a binary file, and storing it (Martinez; pg. 205, Sect. 4, lines 1-2; and Sect. 5, par. 2, line 4);

a contents storage unit for extracting MPEG-7 description information of the XML based textual format file edited, authored, and stored by the contents editor/author (Martinez; pg. 205, Sect. 5, par. 2, line 1-4).

26. Martinez does not disclose storing the MPEG-7 description information for a retrieval process; and a retrieval browser/reproducer for providing a user interface for retrieving MPEG-7 description information stored in the contents retriever, and reproducing the retrieved contents.

27. However, Bober discloses storing the MPEG-7 description information for a retrieval process (Bober, pg. 35, Sect. 3, par 1, lines 4-6); and

a retrieval browser/reproducer for providing a user interface for retrieving MPEG-7 description information stored in the contents retriever, and reproducing the retrieved contents (Bober, pg. 35, Sect. 3, par 2, lines 1-9).

28. It would have been obvious to one of ordinary skill in the art at the time of invention to include the retrieval browser/reproducer for providing a user interface for retrieving the MPEG-7 description information disclosed by Bober in the editing/authoring device of Martinez to achieve the claimed invention. As disclosed by Bober, the motivation for combination would be to locate the desired content and MPEG-4 to transmit and present it (Bober, pg. 33, Sect. 1, lines 7-10).

29. With respect to claim 7, the combination of Martinez and Bober teaches the device of claim 6, and further discloses wherein the contents editor/author comprises: an extensible description generator for receiving either of an MPEG-4 textual format or internal data structure information of object-based MPEG-4 contents (Martinez; pg. 205, Sect. 3, par. 4, lines 1-5), and

MPEG-7 descriptions of the MPEG-4 contents (Martinez; pg. 204, Sect. 3, par. 2, lines 3-4), and generating an XML based textual format file including the MPEG-7 descriptions (Martinez; pg. 205, Sect. 4, lines 1-2);

an extensible description/binary converter for receiving the XML based textual format file including the MPEG-7 descriptions generated by the extensible description generator, and generating them as a binary file (Martinez; pg. 205, Sect. 5, par. 1, lines 1-2 and pg. 206, Sect. 7, par. 4); and

an XML based contents storage unit for storing the XML based textual format file generated by the extensible description generator and the binary file generated by the extensible description/binary converter (Martinez; pg. 205, Sect. 5, par. 2, lines 1-2 and 4).

30. With respect to claim 9, the combination of Martinez and Bober teaches the device of claim 6, and further discloses wherein the retrieval browser/reproducer comprises: a retrieval browser for receiving a retrieval request from a user (Bober, pg. 35, Sect. 3, par. 2, line 1), commanding the contents retriever to perform retrieval (Bober, pg. 35, Sect. 3, par. 2, lines 2-5), receiving retrieval results, and outputting them to the user (Bober, pg. 35, Sect. 3, par. 2, lines 6-7); and

a reproducer for reproducing the contents retrieved through the retrieval browser (Bober, pg. 35, Sect. 3, par. 2, line 6-7).

31. **Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez and Bober, as applied to claim 6, and further in view of Ryu.**

32. With respect to claim 8, the combination of Martinez and Bober teaches the device of claim 6, but does not disclose wherein the contents retriever comprises: a file parsing module for receiving the XML based textual format file or the binary file produced using the MPEG descriptions, and extracting MPEG-7 descriptions included in the corresponding;

an MPEG-7 description storage unit for generating the MPEG-7 description information extracted from the file parsing module into a database, and storing the information.

33. However, Ryu discloses wherein the contents retriever comprises: a file parsing module for receiving the XML based textual format file or the binary file produced using the MPEG descriptions (Ryu; pg. 269, Sec. 3.2, par. 4, lines 1-6), and

extracting MPEG-7 descriptions included in the corresponding file (Ryu; pg. 270, Sec. 3.2, par. 7, lines 6-9; MPEG-7 metadata visualizer/editor can display all the information i.e. *extracting MPEG-7 descriptions included in the corresponding file*);

an MPEG-7 description storage unit for generating the MPEG-7 description information extracted from the file parsing module into a database, and storing the information (Ryu; pg. 270, Sec. 3.2, par. 7, lines 3-4).

34. Bober does, however, disclose a retrieval module for retrieving the MPEG-7 description information stored in the MPEG-7 description storage unit according to a request by a user, and outputting corresponding results (Bober, pg. 35, Sect. 3, par 2, lines 1-9).

35. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the invention of Martinez and Bober, as motivation already suggested above, to include the parsing, extraction, and storage capabilities of Ryu to achieve the claimed invention. As disclosed by Ryu, the motivation for combination would be to require that various types of multimedia content be organized for users to efficiently search/retrieve what they want from enormous amount of data, to manipulate and transmit it (Ryu; pg. 267, Sect. 1, par. 1, lines 8-12).

Conclusion

36. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

- a. Tabatabai et al. (Pub. No. US 2003/0031260)
- b. Yesun Joung, Kyuheon Kim, Keyongok Kang; "The Development of MPEG-7 Interface Over MPEG-4"; 2003 IEEE; pgs. 276-277.
- c. Won-Sik Cheong, Hyun-cheol Kim, Kwang Yong Kim, Myoung o Lee, Kyuheon Kim, Jinwoong Kim; "Development of an Interactive Contents Authoring System for

MPEG-4"; June 18-20, 2001; 2001 Proceedings of Workshop and Exhibition on MPEG-4; pgs. 17-20.

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMY D. ENGELSKIRCHEN whose telephone number is (571)270-1903. The examiner can normally be reached on M-F 7:30am-5:00pm.

38. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on (571) 272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

39. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDE 1/15/2008

/Nabil El-Hady, Ph.D, M.B.A./
Supervisory Patent Examiner, Art Unit 4152

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